

LXA Series

- Rated voltage range up to 525V_{dc}
- Endurance with ripple current : 105°C 5000 hours (2000 hours for 500V_{dc} & 525V_{dc})
- High reliability products



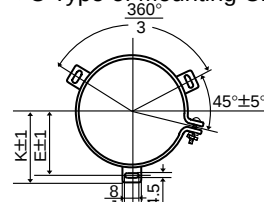
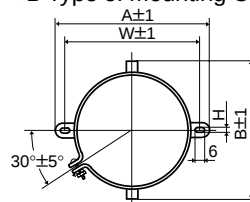
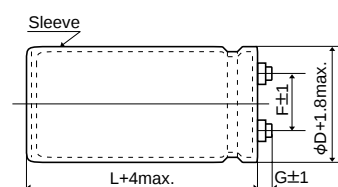
SPECIFICATIONS

Items	Characteristics		
Category	–40 to +105°C (10 to 100V _{dc}) –25 to +105°C (160 to 525V _{dc})		
Temperature Range			
Rated Voltage Range	10 to 525V _{dc}		
Capacitance Tolerance	–10 to +50% (T) (10 to 250V _{dc}) ±20% (M) (350 to 525V _{dc})		(at 20°C, 120Hz)
Leakage Current	I=0.02CV or 5mA, whichever is smaller. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 5 minutes)		
Dissipation Factor (tanδ)	See STANDARD RATINGS (10 to 250V _{dc}) 0.20max (350 to 525V _{dc})		(at 20°C, 120Hz)
Low Temperature Characteristics	Capacitance change C(-40°C)/C(+20°C)≥0.6(10 to 100V _{dc}) C(-25°C)/C(+20°C)≥0.7(160 to 250V _{dc}) C(-25°C)/C(+20°C)≥0.65(350 to 525V _{dc}) (at 120Hz)		
Insulation Resistance	When measured between the terminals shorted each other and the mounting clamp on the insulating sleeve covering the case by using an insulation resistance meter of 500V _{dc} , the insulation resistance shall not be less than 100MΩ.		
Insulation Withstanding Voltage	When a voltage of 2000Vac is applied for 1 minute between the terminals shorted each other and the mounting clamp on the insulating sleeve covering the case, there shall not be electrical damage.		
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after DC voltage with the rated ripple current is applied for 5000 hours (2000 hours for 500 & 525V _{dc} products) at 105°C.		
	Capacitance change	≤±20% of the initial value	
	D.F. (tanδ)	≤200% of the initial specified value	
	Leakage current	≤The initial specified value	
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours at 105°C without voltage applied.		
	Rated voltage	10 to 250V _{dc}	350 to 525V _{dc}
	Capacitance change	≤±15% of the initial value	≤±20% of the initial value
	D.F. (tanδ)	≤150% of the initial specified value	≤200% of the initial specified value
	Leakage current	≤The initial specified value	≤The initial specified value

DIMENSIONS (Terminal Type=LGSN) [mm]

●B Type of Mounting Clamp

●C Type of Mounting Clamp



φD	G	
	10 to 250V _{dc}	350 to 525V _{dc}
~φ63.5	6	6
φ76	5	6
φ89	5	4

φD	A	B	W	H	F
35	58	44	48	3.5	12.7
50	78	64	68	4.5	22.4
63.5	90	76	80	4.5	28.0
76	104.5	90	93.5	4.5	31.5

φD	E	K	J	F
50	32.5	37.0	14.0	22.4
63.5	38.1	43.5	14.0	28.0
76	44.5	50.0	14.0	31.5
89	50.8	56.5	16.0	31.5

<Screw specifications>

Plus hexagon-headed screw:

M5×0.8×10

Maximum screw tightening torque:

3.23Nm

* The screw and the mounting clamp are separately supplied and not attached to the product.

PART NUMBERING SYSTEM

LXA	450	LGSN	3300	M	C	E10R
						Case code
						Type of mounting clamp, if required
						Capacitance tolerance
						Nominal capacitance in μF
						Screw terminal type
						Rated voltage in volts
						Series name

*Capacitance tolerance

T : 10 to 250V_{dc}

M : 350 to 525V_{dc}

CASE CODE

φD (mm)	L (mm)	50	60	80	85	100	105	120	125	140	145	190	270
35	A5	—	A8	—	A10	—	A12	—	—	—	—	—	—
50	—	C6	C8	C8R	C10	C10R	C12	C12R	—	C14R	—	—	—
63.5	—	—	—	D8R	D10	D10R	D12	D12R	—	D14R	—	—	—
76	—	—	—	E8R	E10	E10R	E12	E12R	E14	E14R	E19	—	—
89	—	—	—	—	—	—	—	F12R	F14	F14R	F19	F27	—

◆STANDARD RATINGS

μF	V _{dc} SV	10			16			25			35			50			63			80		
		13			20			32			44			63			79			100		
2,200																				A 5	1.9	0.15
2,700																				A 5	1.9	0.15
3,300																				A 5	2.1	0.15
3,900																				A 8	2.7	0.20
4,700																				A 8	2.9	0.20
5,600																				A10	3.1	0.15
6,800																				A10	3.5	0.15
8,200																				A12	4.1	0.20
10,000																				C 8	4.8	0.20
12,000																				C10	5.6	0.20
15,000																				C10	6.1	0.20
18,000																				C12	7.4	0.20
22,000																				D12	8.0	0.25
27,000																				E10	9.1	0.25
33,000																				E12	9.7	0.30
39,000																				E14	11.5	0.30
47,000																				F14	12.5	0.35
56,000																						
68,000																						
82,000																						
100,000																						
120,000																						
150,000																						
180,000																						
220,000																						
270,000																						
330,000																						
390,000																						

μF	V _{dc} SV	100			160			200			250		
		125			200			250			300		
330											A 5	0.7	0.15
390											A 8	0.8	0.15
470											A 8	0.9	0.15
560											A 8	1.0	0.15
680											A10	1.2	0.15
820											A10	1.4	0.15
1,000											A12	1.6	0.15
1,200											C 8	1.8	0.15
1,500											C10	2.2	0.15
1,800											C12	2.6	0.15
2,200											C12	2.8	0.15
2,700											D10	3.3	0.15
3,300											D12	4.0	0.15
3,900											E10	4.4	0.15
4,700											E12	5.2	0.15
5,600											E14	6.1	0.15
6,800											F14	7.4	0.15
8,200													
10,000													
12,000													
15,000													
18,000													
22,000													
27,000													

Max. tanδ at 20°C, 120Hz
Rated ripple current (Arms) at 105°C, 120Hz
Case code

◆STANDARD RATINGS

Case size φD×L (mm)	V _{dc}	350		400		450	
	SV	400		450		500	
	Items	Capacitance (μF) 20°C, 120Hz	Rated ripple current (Arms) 105°C, 120Hz	Capacitance (μF) 20°C, 120Hz	Rated ripple current (Arms) 105°C, 120Hz	Capacitance (μF) 20°C, 120Hz	Rated ripple current (Arms) 105°C, 120Hz
50×60		820	3.3	680	3.0	560	2.6
50×85		1,500	5.2	1,200	4.7	1,000	4.0
50×105		2,200	7.0	1,800	6.3	1,200	4.8
50×125		2,700	8.4	2,200	7.5	1,800	6.4
50×145		3,300	9.9	2,700	8.9	2,200	7.6
63.5×85		2,700	8.1	2,200	7.3	1,800	6.2
63.5×105		3,300	9.8	2,700	8.8	2,200	7.5
63.5×125		3,900	11.5	3,300	10.5	2,700	8.9
63.5×145		5,600	14.7	4,700	13.4	3,300	10.6
76×85		3,900	10.8	3,300	9.9	2,700	8.4
76×105						3,300	10.2
76×125		6,800	16.8	4,700	13.9	3,900	11.9
76×145		8,200	19.6	6,800	17.9	4,700	14.0
76×190		10,000	23.0	8,200	20.8	6,800	17.3
89×125		8,200	18.9	6,800	17.2	5,600	14.2
89×145		10,000	22.2	8,200	20.1	6,800	16.7
89×190		15,000	30.6	12,000	27.4	10,000	22.8
89×270		22,000	43.5	18,000	39.4	15,000	32.8

Case size φD×L (mm)	V _{dc}	500		525	
	SV	550		575	
	Items	Capacitance (μF) 20°C, 120Hz	Rated ripple current (Arms) 105°C, 120Hz	Capacitance (μF) 20°C, 120Hz	Rated ripple current (Arms) 105°C, 120Hz
50×60		470	2.4	390	2.2
50×85		820	3.6	680	3.3
50×105		1,000	4.4		
50×125		1,200	5.2	1,000	4.8
50×145		1,500	6.3		
63.5×85		1,200	5.0		
63.5×105		1,800	6.8	1,500	6.2
63.5×125				1,800	7.3
63.5×145		2,700	9.6	2,200	8.6
76×85					
76×105		2,700	9.2	2,200	8.3
76×125				2,700	9.9
76×145		3,900	12.7	3,300	11.7
76×190				4,700	14.4
89×125		3,900	11.9		
89×145				4,700	13.9
89×190		6,800	18.8	5,600	17.1
89×270		10,000	26.8		



LXA Series

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers (10 to 250V_{dc})

Frequency (Hz)	50	120	300	1k	10k	50k
10 to 50V _{dc}	0.95	1.00	1.03	1.05	1.09	1.12
63 to 80V _{dc}	0.90	1.00	1.06	1.10	1.18	1.22
100 to 250V _{dc}	0.80	1.00	1.12	1.22	1.30	1.33

(350 to 525V_{dc})

Frequency (Hz)	50	120	300	1k	3k
Coefficient	0.8	1.0	1.2	1.5	1.6

Note : The endurance of capacitors is shortened with internal heating produced by ripple currents at the rate of halving the lifetime with every 5 to 10°C rise. When long life performance is requested in actual use, the rms ripple current has to be reduced. Also, for the LXA series capacitors (350 to 525V_{dc} products), using them at operating voltage can extend their lifetime. For the detail, please contact a representative of Nippon Chemi-con.